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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/848,243	04/29/1997	MASATOSHI NAGANO	35.C9371-CII	2521

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

WILSON, JACQUELINE B

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/848,243

Applicant(s)

Nagano

Examiner

Jacqueline Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 30, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION VII

Response to Arguments

1. Applicant's arguments filed 10/30/02 have been fully considered but they are not persuasive.

The applicant argues that the prior art fails to teach controlling to correct an electrical image signal output from the photoelectric conversion means using correction information read out from a memory corresponding to the light transmission factor throughout the physical element, providing an optical image to the photoelectric conversion means, to correct the change in optical characteristic of the physical element and to drive the physical element according to the corrected electrical image signal. The applicant relies on the teachings of the multiplier (441), color correction memory (440), and color encoder (448) of Toda et al.'847 as not teaching the limitations of Claim 1. However, these elements are not used or discussed by the examiner to teach correcting the electrical image signal. The applicant states that the integrating circuits (434R,G, and B) do not refer to information stored in a color correction memory (440) to perform a process on an electrical image signal by controlling the drive of the physical element according to the corrected electrical image signal. The examiner disagrees. Toda et al.'847 teaches a photoelectric conversion means (411; CCD) which receives an optical image transmitted through the physical element (412; LC iris) and converts the optical image into an electrical image signal (see fig. 45). The memory means (438) stores correcting information for correcting a change in an optical characteristic of the physical element (see col. 30, lines 50-56). Before the electrical image signal is supplied to the A/D converter, the

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signal is split such that the image signal is supplied to the control circuit (432) as well as the A/D converter (see fig. 45). The control means (437) processes the electrical image signal in accordance with correcting information read out from the memory means (438) which corresponds to the light transmission factor throughout the physical element (col. 30, lines 47+). The electrical image signal, which is supplied to control means, is corrected in order to correct the change in the optical characteristic of the physical element and to correct the controlling drive (439) of the physical element according to the corrected electrical image signal. The continuous loop of the image signal (which is split before the being digitally converted (415)) that enters the control circuit (432) for correcting the physical element (412) using the correcting information read out from the memory means (438) indicates that the physical element is controlled according to the corrected electrical image signal since the signal is continuously corrected. Therefore, the rejections are maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Toda et al. (U.S. 5,047,847).

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Regarding Claim 1, the examiner believes that the claims are written broadly enough to read on fig. 45 of Toda et al.'847. Toda et al.'847 teaches a "physical element" (referred to as an LC iris, fig. 45, element 412) arranged in a photographing optical system (referred to as an endoscope), "photoelectric conversion means" for receiving an optical image transmitted through the physical element at a position of an imaging plane and for converting the optical image into an electrical image signal (referred to as a CCD 411), "memory means" for storing correcting information for correcting a change in an optical characteristic of the physical element with respect to a change of the light transmission factor throughout the physical element (col. 30, lines 47-56), and "control means" for correcting the electrical image signal output from the photoelectric conversion using the correcting information read out from the memory means corresponding to the light transmission factor throughout the physical element, to correct the change in the optical characteristic of the physical element, and controlling drive of the physical element according to the corrected electrical image signal (elements 437 and 439, col. 30, lines 47-62). The examiner interprets the function of the control means as follows. In fig. 45, correcting information output from the memory means (438) is supplied to the control (432, 437) for correcting the change in the optical characteristic of the physical element (412), and controlling drive of the physical element (439). Each time the correction loop is performed, the signal output from buffer (414) is a corrected electrical image signal which is supplied to the control means (432). Therefore, this reads on the limitation of the control means for controlling drive of the physical element according to the corrected electrical image signal.

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Regarding Claim 2, Toda et al. '847 teaches the correction means adjusts a correction amount of wavelength dependency characteristics of the light transmission factor (col. 29, lines 40-42).

Regarding Claim 3, Toda et al. '847 teaches the correction by the correction means is achieved by auto white-balance control for an output signal from the photoelectric conversion means (col. 29, lines 22-28; col. 29, lines 35-40).

Regarding Claim 4, Toda et al. '847 teaches the correction of the correction means is achieved by changing a sensitivity of the photoelectric conversion means in accordance with a light wavelength (col. 29, lines 20-36).

Regarding Claims 5 and 6, Toda et al. '847 teaches the correction by correction means is achieved by another physical element (filter) capable of controlling a light transmission factor in the photographing optical system (Fig. 56, element 650; col. 37, lines 47-60).

Regarding Claim 7, Toda et al. '847 teaches a correction means comprising a storage means for storing at least one of the light transmission factor wavelength dependency of the physical element and the correction amount of the light transmission factor wavelength dependency of the physical element (referred to as color correcting memory, Fig. 45, element 440; col. 31, lines 3-6).

Regarding Claim 8, Toda et al. '847 teaches the storage means stores at least one of a plurality of light transmission factor wavelength dependencies and a plurality of correction amounts in accordance with at least one of the light transmission factor and the light transmission amount of the physical element (col. 30, lines 47- col. 31, line 12).

Claim 9 is analyzed and discussed with respect to Claim 1. (See rejection of claim 1 above.)

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The exposure amount adjustment means is the white balance correcting means (427).

Claims 10 and 11 are analyzed and discussed with respect to Claim 2. (See rejection of claim 2 above.)

Claim 12 is analyzed and discussed with respect to Claim 1. (See rejection of claim 1 above.)

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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5. Any inquiries concerning this communication from the examiner should be directed to **Jacqueline Wilson** whose telephone number is (703) 308-5080. The examiner can normally be reached Monday-Friday (alternate Fridays off) from 9:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reached at (703) 305-4929. The fax number for this group is (703) 872-9314.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or Faxed to:

(703) 308-9051, (for formal communication intended for entry)

or:


(703) 872-9314, (for informal or draft communications, please label "PROPOSED"

or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

JBW

January 10, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600